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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/761,606	01/16/2001	Jack E. Hunnell	2778-119	5806
23448	7590	02/18/2004	EXAMINER	
INTELLECTUAL PROPERTY / TECHNOLOGY LAW			LUDLOW, JAN M	
PO BOX 14329			ART UNIT	
RESEARCH TRIANGLE PARK, NC 27709			PAPER NUMBER	
			1743	

DATE MAILED: 02/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/761,606	Applicant(s) HUNNELL ET AL.	
	Examiner Jan M. Ludlow	Art Unit 1743	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-32 and 34-40 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 35-40 is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-15, 17, 18, 20-22, 29-32 and 34 is/are rejected.
- 7) ☒ Claim(s) 16, 19 and 23-28 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 January 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1, 2, 11-15, 17-18, 20, 22, 29-32, 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baunoch et al.

Baunoch teaches a temperature controlled (heated) retort 16, paraffin reservoirs 20 in oven/chamber 32 with heater 21, reagent containers 40 in a chamber 14, heated

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rotary valve 34 [0025], positioned as claimed, controller 28 and pump 72 [0027]. Fumes are filtered prior to exhaust [0028]. The controller may optionally use a computer [0029].

Baunoch fails to explicitly teach a computer-controlled embodiment.

It would have been obvious to use a computer as or with the controller of Baunoch because Baunoch explicitly teaches to do so.

5. Claims 1, 2, 11-15, 17-18, 20, 22, 29-32, 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Toya.

Toya teaches a retort 20 with heater 46, reagent vessels 24, including wax vessels in oven 54, rotary valve 27, pump 30 and microprocessor controller 150 with display and input devices. Conduits 48 and 50 as well as valve assembly 26 (which includes valve 27) are also heated (col. 5, lines 24-25). A scrubber 68 treats exhaust gases.

6. Toya fails to teach a chamber for the reagent containers.

It would have been obvious to provide a housing and a chamber for the reagent containers of Toya in order to provide a structure for isolating the apparatus from the environment as was known in the art, e.g., to shield operating parts from dust or other environmental contamination and to protect users from moving parts. Such a housing would inherently include a chamber for holding the containers, i.e., whatever volume surrounds the containers.

7. Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Toya or Baunoch as applied to claims 1-2 above, and further in view of Schmehl.

8. The primary reference fails to teach plastic bottles and quick connects.

9. Schmehl teaches a system similar to that of Toya or Baunoch. Reagents are provided in plastic bottles with quick connections (bridge cols. 4-5).

10. It would have been obvious to provide the reagents of Toya or Baunoch in quick connect plastic bottles as taught by Schmehl in order to contain the reagents in inert, break-resistant, easily changed containers. In that the wax is shown in a bottle similar to that of the reagents, it would have been obvious to provide the wax in the same type of bottle as the reagents.

11. Claims 6-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Toya or Baunoch as applied to claim 1 above, and further in view of Pickett.

Toya or Baunoch fails to teach a "Maltese cross" gear in the rotary valve.

Pickett teaches a rotary valve suitable for use in a tissue processing apparatus. The valve includes a disc with detents (col. 4, line 2) for registering the valve ports. A switch including a sensor is also provided (col. 5, lines 60-65). It is the examiner's position that the disc with detents constitutes a Maltese cross gear. See, e.g., Van Riemsdijk.

It would have been obvious to use the valve of Pickett in the device of Toya or Baunoch because Pickett teaches that the valve is suitable for use in such a device.

12. Claims 18, 20, 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Toya or Baunoch as applied to claim 1 above, and further in view of Rasmussen and/or Petschek.

The primary references fail to teach indicating when reagents are used and require replacement.

Rasmussen teaches an automated laboratory device using reagents. Sensors indicate when a reagent is used up and requires replacement and the operator is signaled to make the replacement (col. 1, lines 37-57).

Petschek teaches an automated laboratory device using reagents. Sensors indicate when a reagent is used up and requires replacement and the operator is signaled to make the replacement (col. 5, lines 4-14).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide an indication of reagent use and replacement needs in the controller of the primary references in order to automate reagent management as taught by Rasmussen and/or Petschek in an automated laboratory device.

13. Claims 16, 19, 23-28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

14. Claims 35-40 are allowed.

15. The following is a statement of reasons for the indication of allowable subject matter: The prior art fails to teach or suggest a tissue processing device as claimed including heaters positioned as claimed or controller operative as claimed.

16. Applicant's arguments, see response, filed December 12, 2003, with respect to the rejection(s) of claim(s) under 35 USC 103(a) have been fully considered and are

persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of the art above.

17. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

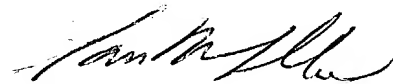
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jan M. Ludlow whose telephone number is (571) 272-1260. The examiner can normally be reached on Monday-Thursday, 11:30 am - 8:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill A. Warden can be reached on (571) 272-1267. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jan M. Ludlow  
Primary Examiner  
Art Unit 1743

Jml  
February 7, 2004